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08/914,789	08/20/97	KATZ	C 00464.097255

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EXAMINER

CRECCA, M

ART UNIT

PAPER NUMBER

2765

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04/05/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/914,789

Applicant(s)

KATZ ET AL.

Examiner

Michele S. Crecca

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 17) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: _____

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DETAILED ACTION

Response to Arguments

1. In view of the Appeal Brief filed on January 14, 2000, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (a) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (b) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Regarding the 35 USC 101 rejection of paper no. 8, paragraphs 15-16, the applicant's arguments are persuasive. The examiner originally asserted that claims 1-10, as amended, do not have a "practical application within the technological arts", nor are the claims within the scope of the technological arts in general (note: "pen and paper"). In view of the applicant's arguments (paper no. 11, page 11) and the examiner's review of the specification, the examiner concurs with the applicant that the claims recite a practical application (i.e. "generating reports"). The reports generated by the claimed system are "useful" and the specification clearly places

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their generation in a technological environment (please note page 10 of the specification, lines 1-27 and fig. 1 as examples).

The rejection of claims 1-10 under 35 USC 101 is therefore removed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whybrow ("Warehousing Benefits", *Banking Technology*, May 1995) in view of CFI Proservice's product "ProActive" (referenced by PR Newswire, 1994 (hereinafter referred to as "U"), by Prince, 1995 (hereinafter referred to as "V") and Business Journal-Portland, 1994 (hereinafter referred to as "W")).

Whybrow's article recites the use of a "data warehouse", or repository, in a banking environment (abstract of article). Whybrow teaches "...data warehousing means putting a single database above a company's existing systems. The warehouse is fed by the underlying systems, data is held in a standard, consolidated format, and all management reporting and analysis is then driven from this repository" (paragraph 3).

Claim 1: Whybrow teaches a method for "storing and compiling data for analysis and reporting..." (abstract) comprising:

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“extracting data” (paragraph 3 and paragraph 6, “collecting” data);
“reformatting said data” (paragraph 6, “translated” data, and paragraph 7);
“storing said formatted data, and integrating said stored data with previously stored data...” (abstract and paragraph 3); and
“preparing reports” (paragraph 3).

However, Whybrow does not specifically recite the step of “normalizing” the data and “preparing reports...to indicate *fair lending compliance*.” CFI Proservice’s “*ProActive*” is a fair lending compliance software product which allows a bank to “*collect, analyze, report, and map data related to lending and deposit activities*” (reference “U”, paragraph 6). *ProActive* “*will generate HMDA reports in the electronic formats required by federal agencies...*” (ref. “U”, para. 8). As stated in reference “U”, *ProActive* allows a bank to analyze and report on fair lending compliance based upon a collection of data (paragraphs 6-9). Whybrow’s repository is a collection of data in a standardized, consolidated format which can be used to generate management reports (paragraph 3). It would have been obvious to one of ordinary skill in the art at the time of the applicant’s invention to combine the use of the *ProActive* product with the data repository of Whybrow as the repository would provide the software product with the data needed to generate the required reports. The financial institution is required by law to provide information to the government to prove that they are meeting the standards of the fair lending laws. By establishing a data repository and using a specialized compliance product, *ProActive*, the financial institution can meet those requirements in an efficient, streamlined fashion.

Regarding the step of “normalizing” the data, although this feature is not explicitly taught by the references, Official Notice is taken that the use of “normalization” techniques is old and well-known in the art of statistical analysis. It would have been obvious to one of ordinary skill in

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the art at the time of the applicant's invention to normalize the data in order to create meaningful data for use in management reporting. (As evidenced by the article "Wessex's Pro/Filer makes desktop mapping easy" (*Bank Marketing*, 1994) note "*Pro/Filer quickly computes, sums, averages, and normalizes....*" (para. 9) and "*...a means of complying with CRA*" (para. 12)).

Claim 2: Whybrow teaches a method for "storing and compiling of data for analysis and reporting..." (paragraph 1), however, Whybrow does not teach the transmission of "said reports to at least one regulator of the financial institution." *ProActive* compliance software produces electronic reports which are sent to federal agencies, that is "regulators" (ref. U, para. 9). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to transmit the reports to the regulator(s) of the financial institution as the reports are required by the fair lending laws, therefore, for a financial institution to remain in compliance with the law, the reports will be sent to the federal regulators.

Claim 3: Whybrow teaches a method for "storing and compiling of data for analysis and reporting..." (paragraph 1) and *ProActive* compliance software produces electronic reports which are sent to federal agencies. However, the references do not specifically recited that the reports are sent on a "predetermined date", Official Notice is taken that reporting on a regular basis, "predetermined dates", is old and well-known in the regulation industry. The fair lending laws, notably HMDA and CRA, require reporting from financial institutions in order to determine if the institution is in compliance with the fair lending laws. It would have been obvious to one of ordinary skill in the art of regulation to require those institutions to report on a regular basis as

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this is the best means by which to establish a systematic approach to monitoring fair lending compliance.

Claim 4: Whybrow teaches a method for "storing and compiling of data for analysis and reporting..." (paragraph 1), and *ProActive* compliance software produces electronic reports which are sent to federal agencies. However, the references do not specifically recite that the regulators include the "OCC, FRS, FDIC, and OTS." Official Notice is taken that sending required regulatory reports (compliance reports) to the OCC, FRS, FDIC, and OTS is old and well-known in the art of regulation. It would have been obvious to one of ordinary skill in the art of regulation to send compliance reports to the federal regulatory agencies noted above because these agencies have the responsibility to perform federal regulatory duties. (As evidenced by the CRA and HMDA laws and numerous regulations – as an example please note the following:

Community Reinvestment Act Regulations (Vol. 58, Is: 243, Page: 67,466)
CITATION NUMBER: 58 FR 67466
Date: TUESDAY, DECEMBER 21, 1993
AGENCY: Office of the Comptroller of the Currency--(OCC); Federal Deposit Insurance Corporation--(FDIC); Federal Reserve System--(FRS); Office of Thrift Supervision--(OTS)
DOCUMENT TYPE: Proposed Rules

This citation is one of many documenting proposed rulemaking and rule changes by the agencies charged with monitoring fairness in lending. Note the agencies are OCC, FDIC, FRS, and OTS).

Claim 5: Whybrow teaches a method for "storing and compiling of data for analysis and reporting..." (paragraph 1), Whybrow's system creates a data repository to be used for generating reports, however, Whybrow does not specifically recite the use of "geo-coding" the

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data. *ProActive* compliance software does teach the step of “geo-coding” data (ref. V, paras. 7-9 and ref. U, para. 10). It would have been obvious to one of ordinary skill in the art of banking to include the “geo-coding” as a step in creating compliance reports. Geo-coding is essential to the creation of compliance reports because it is through this process that loan data can be analyzed in terms of geographical area and loan practices of financial institutions can be analyzed in view of the communities the institutions service (for example - under-served areas within the communities can be defined).

Claims 6 and 7: Whybrow teaches a method for “storing and compiling data for analysis and reporting...”, including the step of data “extraction” (paras. 3 and 6), however, the reference does not discuss the frequency in which the data extraction, or collection, should be performed. Official Notice is taken that data warehouses, or repositories, often extract data and feed it into the repository at regular intervals. It would have been obvious to one of ordinary skill in the art of data warehouse management to regularly, notably monthly, collect data for the repository so that the repository is kept up-to-date. By maintaining the data in the repository on a regular basis, the reports generated from the repository will be up-to-date and more accurate than reports using older data.

Claims 8 and 9: recite the method where the sources of data include “branches of the financial institution” (claim 8) and wherein the sources also include “at least one from the group of bankcard processing centers, student loan processing centers, business loan processing centers, and US territorial locations of the financial institution” (claim 9). Whybrow’s data warehouse, or repository, system includes the step of “feeding” data to the warehouse from

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various “systems” (paragraphs 3 and 6), however, the reference does not explicitly state what those systems are. The *ProActive* compliance software generates reports for transmission to regulatory agencies. The federal regulatory agencies require that specific data be sent to them and the final result of this effort is that the regulatory agencies give the financial institution a rating. In order to do this, the federal agencies require that the data represent the financial institution as a whole, therefore, it is essential that the institutions collect the data from branch offices and any specialized processing centers under the auspices of the institution. It would have been obvious to one of ordinary skill in the art of banking, particularly compliance officers, to collect data from all business units of the bank in order to completely and accurately reflect the financial institutions' lending practices (as evidenced by the CRA and HMDA laws and regulations).

Claim 10: Whybrow teaches a method for “storing and compiling data...for reporting”, however, Whybrow does not specifically recite that the “reports include reports required by federal regulators under the fair lending laws.” *ProActive* compliance software does include the feature of generating reports required by fair lending laws (ref. U, para. 9 and ref. V, para. 4). It would have been obvious to one of ordinary skill in the art of banking regulation to apply specific federally mandated report generation to the data warehouse of Whybrow. Whybrow's data warehouse provides for report generating, therefore, the specific use of the data for fair lending requirements would be obvious to one skilled in the art because the data is accessible and the financial institutions are required by law to generate the reports.

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Claim 11: Whybrow teaches an apparatus for performing "data collection and analysis within a financial institution" (abstract) comprising:

"a plurality of feeds... in potentially different formats" (paras. 3, 5 and 6 "*the warehouse is fed by underlying systems*" and "*...information needs to be collected, cleaned, and then translated into a consolidated format*" this step shows that the data can be in different formats)

"standardizing data" (paragraph 3);

"a repository for receiving and storing said data" (article in entirety – a "data warehouse").

Whybrow does not explicitly recite the use of "a workstation for outputting compliance reports...", however, this feature is deemed to be inherent to the Whybrow system. Whybrow teaches that "*...all management reporting is driven from this repository*", the system would be of limited use, if the reports could not, at some time, be output for use.

Whybrow does not specifically recite the step of "normalizing" the data and "performing fair lending compliance data collection and analysis within a financial institution." CFI Proservice's "ProActive" is a fair lending compliance software product which allows a bank to "collect, analyze, report, and map data related to lending and deposit activities" (reference "U", paragraph 6). ProActive "will generate HMDA reports in the electronic formats required by federal agencies..." (ref. "U", para. 8). As stated in reference "U", ProActive allows a bank to analyze and report on fair lending compliance based upon a collection of data (paragraphs 6-9). Whybrow's repository is a collection of data in a standardized, consolidated format which can be used to generate management reports (paragraph 3). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the use of the ProActive product with the data repository of Whybrow as the repository would provide the

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software product with the data needed to generate the required reports. The financial institution is required by law to provide information to the government to prove that they are meeting the standards of the fair lending laws. By establishing a data repository and using a specialized compliance product, *ProActive*, the financial institution can meet those requirements in an efficient, streamlined fashion.

Regarding the step of "normalizing" the data, although this feature is not explicitly taught by the references, Official Notice is taken that the use of "normalization" techniques is old and well-known in the art of statistical analysis. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to normalize the data in order to create meaningful data for use in management reporting. (As evidenced by the article "Wessex's Pro/Filer makes desktop mapping easy" (*Bank Marketing*, 1994) note "*Pro/Filer quickly computes, sums, averages, and normalizes....*" (para. 9) and "*...a means of complying with CRA*" (para. 12)).

Claims 12-15: Whybrow teaches the use of a data repository in a financial institution, however, the reference does not specifically recite the inclusion of a "mainframe computer", "server on a network" or "personal computer." Official Notice is taken that the use of mainframes, servers, and personal computers is old and well-known in the art of data warehouse management.

Regarding the use of a mainframe as both a "standardizing or normalizing means" and a "repository" (claims 12 and 13), it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to utilize a mainframe for processing and storage because a mainframe is designed to accommodate intense computational tasks and can maintain the storage capacity required for a large data repository.

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Regarding the use of a server on a network for the repository (claim 14), it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to utilize a server on a network for the data repository because a server on a network provides the advantage of ready access to the data to the users of the system.

Regarding the use of a personal computer as a workstation (claim 15), it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to utilize a personal computer for the workstation because personal computers are readily available in the marketplace and users are familiar with how they are used.

Claims 16, 17, 18, and 19 recite the elements of the device to be used in executing the method steps of claims 1, 2, 4, and 5. Therefore, claims 16, 17, 18, and 19 are rejected under 35 USC 103(a) as being unpatentable over Whybrow ("Warehousing Benefits", *Banking Technology*, May 1995) in view of CFI Proservice's product "*ProActive*" (referenced by PR Newswire (1994), also by Prince (1995) and finally by Business Journal-Portland (1994)) per the arguments for claims 1, 2, 4, and 5 above.

Claim 20: Whybrow teaches the use of a data repository in a financial institution in order to facilitate report generation and the *ProActive* compliance software generates compliance reports for transmission to regulatory agencies. Although *ProActive* does recite the compilation and transmission of reports, the references do not specifically recite that reports can be generated for "each individual business unit" and for "the entire financial institution."

Whybrow's data warehouse collects data from branch offices and other specialized processing centers. Data warehouses, as a rule, compile, organize, and show connections

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between data. It would be obvious to one of ordinary skill in the art of data warehouse management to permit the generation of reports based on a variety of criteria, namely by business unit or as an aggregate for the entire institution. Because the CRA and HMDA laws require the home office, or main office, to keep complete compliance files for the entire institution, while branch offices must only retain files for their own branch; maintaining this flexibility in report generation would facilitate the analysis of the institution's lending practices as a whole or at the business unit level.

Claim 21: recites wherein the device has a means to "enable determination of trend analysis of the extracted data." *ProActive* compliance software can "...help lenders detect and eliminate unfair lending patterns and practices..." (ref. U, para. 4). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to incorporate the "trend analysis" techniques found in *ProActive* with the data repository of Whybrow. Whybrow's data repository provides the data necessary to perform trend analysis and *ProActive* performs the actual analysis. The CRA and HMDA requirements rely heavily on "trends" in order to determine compliance, therefore, the combination of the repository with the *ProActive* functionality allows the financial institution to analyze lending trends and determine remedies for any problem area which arise from the analysis.

Claim 22: Whybrow teaches the use of a data warehouse system in a financial institution, however, Whybrow does not specifically recite the administrative functions of "backing up," "archiving" and "purging" portions of the stored data. Official Notice is taken that all of these functions would have been old and well-known at the time of the applicant's invention.

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It would have been obvious to one of ordinary skill in the art of data warehouse management to include the administrative functions of backing up, archiving, and purging portions of the data over time as these practices prevent data loss, promote long-term financial record integrity, and prevent the storage devices from completely filling up.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Articles by Zimmerman (1991) and Swift (1990) show the use of "central information files" by financial institutions in order to assist in monitoring compliance requirements.

The articles by Marrinan (1995), Sraeel (1994) and from *Regulatory Compliance Watch* (1994) describe additional software packages used for compliance tracking and reporting including CRA Wiz, GeoPublisher, Census Trax Plus, and Atlas Graphics.

Articles by Avery et al. (1994), Broome (1992), Barefoot (1996), and Radigan (1994) all discuss various aspects of CRA and HDMA compliance reporting.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michele Crecca whose telephone number is (703) 305-0438. The examiner can normally be reached Monday – Friday from 7:00 – 4:30, with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen MacDonald, can be reached at (703) 305-9708.

The fax number for Formal or Official faxes to Technology Center 2700 is (703) 308-9051 or 9052. Draft or Information faxes for this Art Unit can be submitted to (703) 308-5357).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.



ERIC W. STAMBER
PRIMARY EXAMINER